AMENDMENTS TO THE SPECIFICATION

On page 4, please add the following paragraphs between line 11 and line 12:

Figure 11 is a chart illustrating performance of an example oxygen sensor probe.
Figure 12 is a chart illustrating time response of an example oxygen sensor probe.
Figure 13 is a chart illustrating stability of output of an example oxygen sensor.
Figure 14 is a chart illustrating performance of an example carbon dioxide sensor probe.
Figure 15 is a chart illustrating time response of an example carbon dioxide sensor probe.
Figure 16 is a chart illustrating performance of an example pH sensor probe.

On page 25, please replace the paragraph beginning on line 26 with the following rewritten paragraph:

Chart 1, illustrated in Figure 11, shows the performance of a representative example of an oxygen sensor probe over a range of dissolved oxygen concentrations from zero to 150 mmHg partial pressure of oxygen. The response is linear over the range of interest, making the calibration to 5% accuracy a simple process.

On page 26, please delete Chart 1 and Chart 2.

On page 26, please replace the paragraph beginning on line 3 with the following rewritten paragraph:

Besides exhibiting accuracy and linearity, the oxygen sensor provides rapid response to changes in the dissolved oxygen concentration. Chart 2, illustrated in Figure 12, shows the time response of a representative oxygen sensor probe to a sequence of step changes in oxygen partial pressure, demonstrating a settling time of less than 3 minutes to **[[a]]** within 5% of the final value.

On pages 26 and 27, please replace the paragraph beginning on line 9 of page 26 with the following rewritten paragraph:

Besides demonstrating accuracy, linearity, and rapid response, the oxygen sensor provides greater than 72 hours of longevity to satisfy the requirements of the ICU/CCU monitoring application. Chart 3, illustrated in Figure 13, shows the stability of the oxygen sensor output over the course of a 90-hour longevity study. With a constant, room air, partial pressure of oxygen of 150 mmHg, the output of the sensor remains nearly constant for greater than 72 hours except for the expected small variations in output due to temperature fluctuations and noise.

On page 27, please delete Chart 3 and Chart 4.

On page 27, please replace the paragraph beginning on line 5 with the following rewritten paragraph:

Chart 4, illustrated in Figure 14, shows the performance of a representative example of a carbon dioxide sensor probe over a range of dissolved carbon dioxide concentrations from 10 to 100 mmHg partial pressure of carbon dioxide. The response shows the classic logarithmic performance expected for this type of pH-responsive sensor, making calibration to 5% accuracy a simple process.

On pages 27 and 28, please replace the paragraph beginning on line 11 of page 27 with the following rewritten paragraph:

Besides exhibiting accuracy and linearity, the carbon dioxide sensor provides rapid response to changes in the dissolved carbon dioxide concentration. Chart 5, illustrated in Figure 15, shows the time response of a representative carbon dioxide sensor probe to a sequence of step changes in carbon dioxide partial pressure, demonstrated a settling time of less than three minutes to **[[a]]** within 5% of the final value.

On page 28, please delete Chart 5.

On page 28, please replace the paragraph beginning on line 9 with the following rewritten paragraph:

Chart 6, illustrated in Figure 16, shows the performance of a representative pH sensor output over a range of pH from 4 to 10. This pH sensor is mounted in a multi-sensor probe that also includes oxygen, carbon dioxide, and temperature sensors. The response shows the classic linear voltage response to the logarithmic pH parameter. The standard deviation for repeated measurements at a single pH value is approximately 0.02 pH, demonstrating that calibration to the required 0.05 pH accuracy over the physiological range of pH from 7 to 8 is feasible.

On page 29, please delete Chart 6.